

ABSTRACT OF THE DISCLOSURE

In a PLL circuit, a phase error of a reproduced signal is extracted in either a way based on a zero-cross timing or a way based on a self-running timing. A decision is made as to whether the reproduced signal is in a  
5 continuous-wave interval where an inversion period of the reproduced signal remains constant or in a random-wave interval where the inversion period of the reproduced signal varies at random. When the reproduced signal is in a continuous-wave interval, a phase error is extracted on the self-running-timing basis. When the reproduced signal is in a  
10 random-wave interval, a phase error is extracted on the zero-cross-timing basis. A continuous-wave interval may be replaced by a specified-pattern repetition interval where the inversion period of the reproduced signal changes in accordance with a repetition of a specified pattern.